05KL1D Off-grid inverter

KEY STRENGTHS

▌ Support AC and DC power activation.

▌ Adopt LCD display, more convenient operation.

▌ Supports 6 pcs in parallel, and it can be extended to 30kW.

▌ Max. 1.5x DC overmatching.

▌ Optional WIFI or GPRS for remote monitoring.

▌ Support three-phase function.

PV string input

Model	05KL1D
Max. input power (kW)	7.5
No. of MPPT trackers	1
No. of strings per MPPT trackers	1
Starting voltage (V)	100
Max. input voltage (V)	450
MPPT voltage range (V)	100~430
Max. input current per MPPT (A)	32
Max. short-circuit current per MPPT (A)	37

Battery

Rated voltage (V)	48
Battery voltage range (V)	40~56
Max. input/output current (A)	100/100
Battery type	Lithium /Lead-acid
Battery communication	CAN

Grid input

Rated voltage (V)	230
Input voltage range (V)	176~270
Rated grid frequency (Hz)	50/60
Max. charging current (A)	21.7
THDi	<3%
Grid type	L+N+PE

Generator input

Max. input power (kW)	5
Max. input current (A)	21.7

Off-grid output

Rated output power (kW)	5
Rated output voltage (Vac)	230
Max. output current (A)	26.1
Rated output frequency (Hz)	50/60
Voltage waveform	Pure sine wave
THDu	<2%
Power factor	1 (0.8 leading-0.8 lagging)
Automatic switching time (ms)	<10
Overload capacity	110%, 60S/ 120%, 30S/ 150%, 10S
Parallel capability	6 pcs in parallel

Protection

PV input reverse protection	Yes
Antislanding protection	Yes
Insulation resistance test	Yes
AC overcurrent protection	Yes
AC short circuit protection	Yes
AC overvoltage protection	Yes
AC undervoltage protection	Yes
DC/AC surge protection	Yes

General data

Max. inverter efficiency	94%
MPPT efficiency	99%
Operating temperature (℃)	-25℃ ~60℃
Relative humidity	5%-95%
Operating altitude (m)	<2,000 (>2,000 Derating)
Protection class	IP65
Weights (kg)	17
Dimensions W*D*H (mm)	467*454*200
Cooling	Natural
Noise emission (dB)	<35
Display	LCD
Communication interface	RS485 / WIFI (GPRS) / CAN / DRM / Dry-contact
Self-consumption at night (W)	<15
Contamination level	II
Topological	Non-isolated